

Tropical Cyclone (TC) 05S (Crystal)*



First Poor : 0500Z 21 Dec 02

First Fair : 1800Z 22 Dec 02

First TCFA : 0200Z 23 Dec 02

First Warning : 1200Z 23 Dec 02

Last Warning : 0000Z 29 Dec 02, Extratropical

Max Intensity : 90 kts, gusts to 110 kts

Landfall : None

Total Warnings : 12

Remarks:

(1) Tropical Cyclone (TC) 05S was initially described as an area of disturbed weather 145 nm west of Diego Garcia on 21 December, 2002. TC 05S tracked southwestward under the influence of the low to mid-level steering ridge located southeast of the system as it intensified at near a Dvorak T-number per day.

By 0000Z on 25 December, microwave satellite imagery indicated some minor dry air entrainment into the system from the west, with a banding eye feature present. A longwave trough in the mid-tropospheric westerlies began deepening over the Mozambique Channel, and tracking eastward. This trough began to weaken the steering ridge southeast of TC 05S, creating a more poleward track by 0000Z on 26 December. At 1800Z on 26 December, TC 05S reached a maximum intensity of 90 knots while tracking southward and at 0000Z on 27 December, TC 05S passed 118 nm east of Mauritius. By 0000Z on 28 December, there was no longer an eye feature visible and the cyclone had begun extratropical transition and was finalized 24 hours later as an extratropical system.

(2) Despite having passed within 50 nm of St. Brandon and 118 nm of Mauritius, there were no reports of significant damage caused by this system.

*Named by WMO designated RSMC

Statistics for JTWC on TC05S

	WRN	BEST TRACK			POSITION ERRORS								WIND ERRORS							
DTG	NO.	LAT	LONG	wind	00	12	24	36	48	72	96	120	00	12	24	36	48	72	96	120
02122206		7.9S	69.1E	25																
02122212		8.4S	68.9E	25																
02122218		9.0S	68.6E	25																
02122300		9.6S	67.9E	25																
02122306		10.3S	67.2E	25																
02122312	1	11.0S	66.5E	35	5	21	42	42	26				0	-5	-10	-15	-10			
02122400	2	12.3S	65.0E	45	11	8	33	50	55				0	0	0	5	20			
02122412	3	13.5S	63.4E	55	11	8	6	32	72				0	0	0	15	15			
02122500	4	14.5S	62.2E	65	17	25	42	60	38				0	0	15	10	5			
02122512	5	15.6S	61.2E	75	6	38	61	77	84				0	15	5	-15	-20			
02122600	6	16.9S	60.2E	70	12	6	25	43	69				0	-10	-30	-30	-25			
02122612	7	18.4S	59.7E	80	8	6	8	20	36				-10	-25	-30	-25	-20			
02122700	8	19.9S	59.5E	90	5	8	12	42	25				0	0	0	5	30			
02122712	9	21.5S	59.9E	90	8	22	26	43					-10	-10	-10	15				
02122800	10	23.2S	60.6E	80	33	80	72						0	0	15					
02122812	11	25.0S	61.1E	70	8	20							0	20						
02122900	12	26.6S	62.9E	40	20								0							
			AVERAGE		12	22	33	46	51				2	8	12	15	18			
			BIAS										-2	-1	-5	-4	-1			
			# CASE		12	11	10	9	8				12	11	10	9	8			

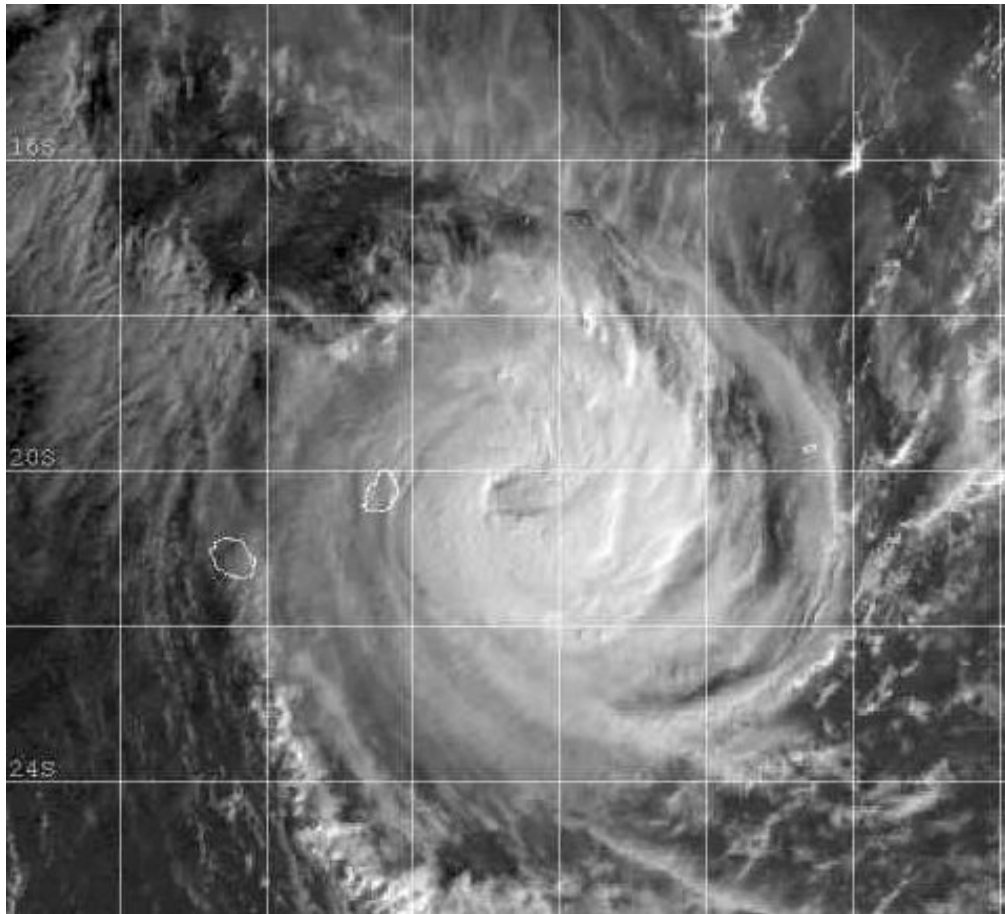


Figure 2-05S-1. 270300Z December 2002 MET-5 visible image of TC 05S (Crystal), 135 nm east of Mauritius island, with an estimated peak intensity of 90 knots.

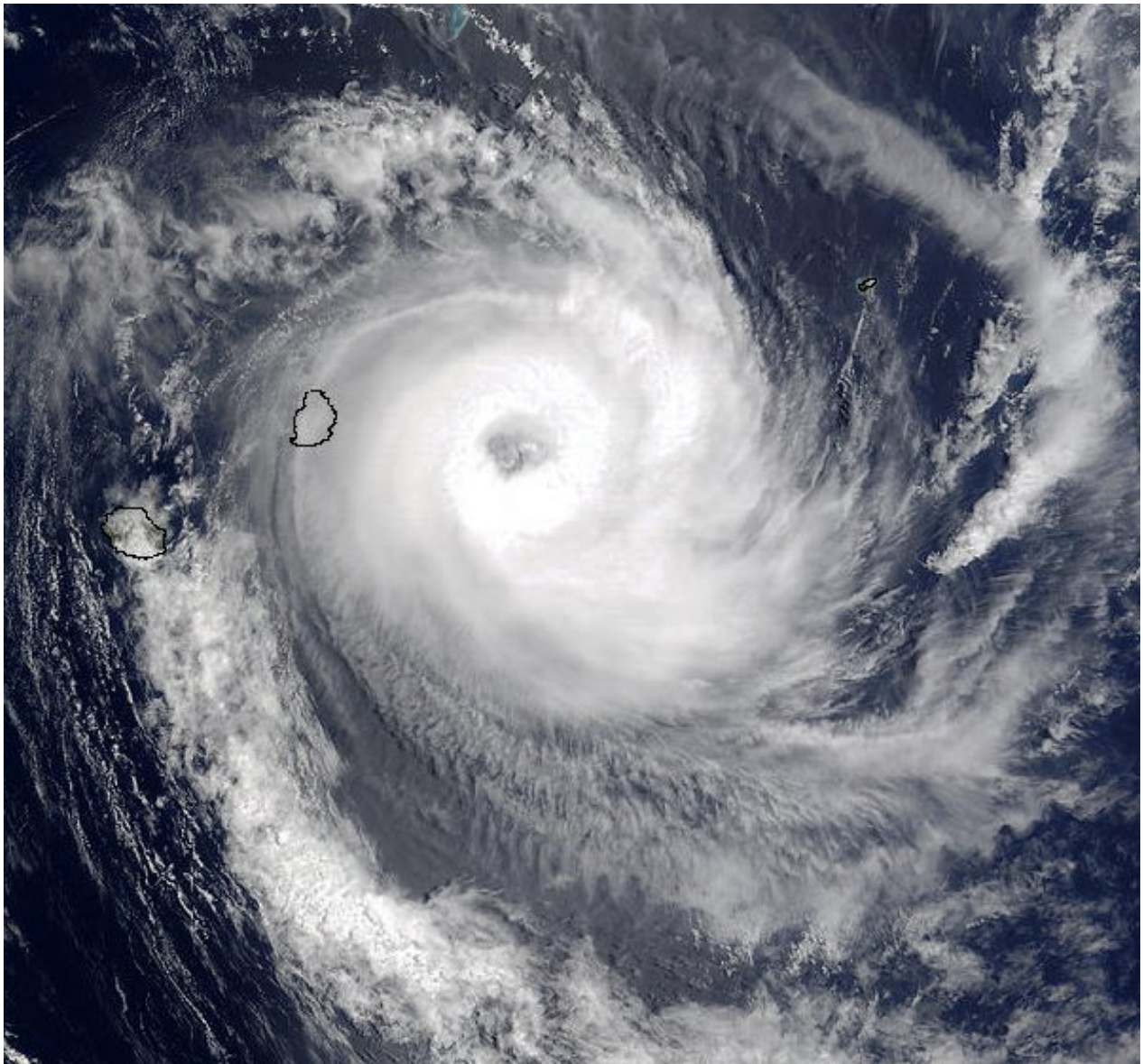
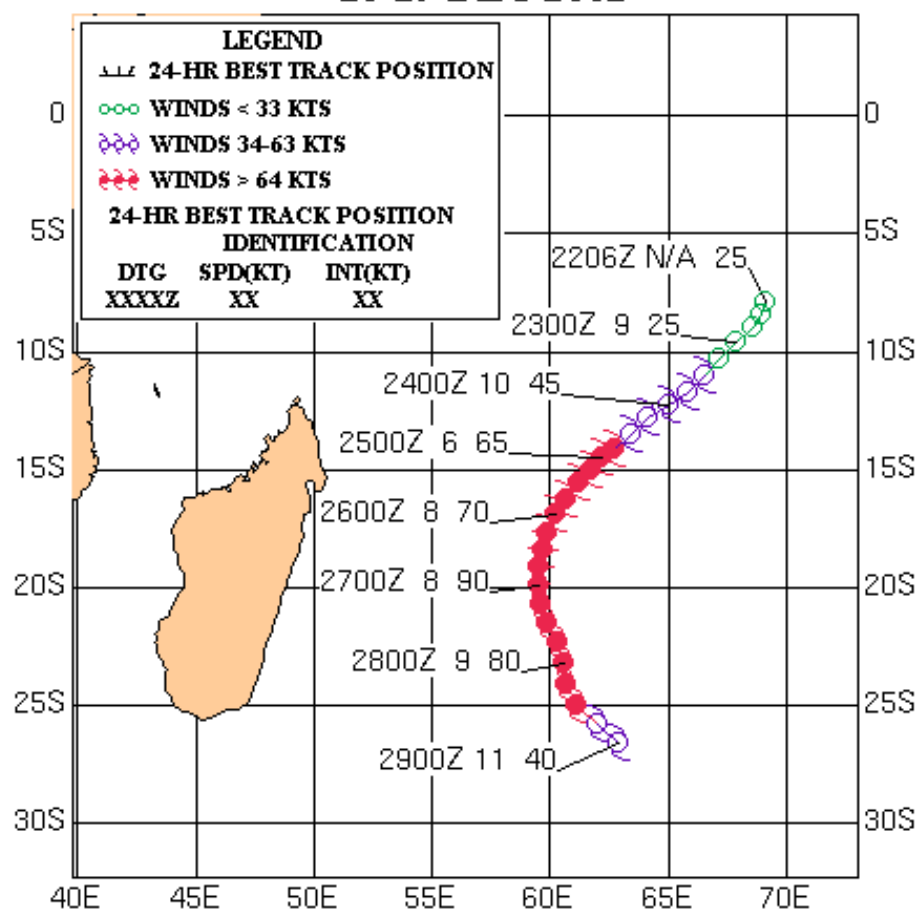


Figure 2-05S-2. 270630Z December 2002 MODIS true-color image of TC 05S (Crystal), located 125nm east-southeast of Mauritius, with an maximum intensity of 90 knots.

TROPICAL CYCLONE 05S (CRYSTAL)

23-29 DEC 2002



Time Intensity for 05S

Intensity (kts)

